

Notice of Allowability

Application No.

09/931,029

Examiner

Marc S. Zimmer

Applicant(s)

AZECHI ET AL.

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview on November 14, 2003.
2. ☒ The allowed claim(s) is/are 1, 3 and 7-18.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. _____. |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Eugene Perez on November 17, 2003.

The application has been amended as follows:

In claim 1, please remove that portion of the claim that follows mention of a "carbonyl group" in line 15 of the claim and place a period after said phrase.

Please add new claim 18:

18. An electrically conductive silicone rubber composition having improved adhesion, comprising:

(A) 100 parts by weight of an organopolysiloxane having at least two aliphatically unsaturated groups in a molecule,

(B) 0.1 to 100 parts by weight of finely divided silica,

(C) 30 to 700 parts by weight of an electrically conductive powder having a construction comprising an inorganic filler or a resin particle covered with a nickel layer, which is in turn covered with a gold layer,

(D) 0.1 to 20 parts by weight of an adhesive aid, and

(E) a curing agent in the form of an organic peroxide in an amount sufficient to cure the organopolysiloxane.

The amendment of claim 1 was necessary to correct a problem an imminent reject under 35 U.S.C. 112, second paragraph. (The Examiner notified Applicant that the portion of the claim following mention of a carbonyl group was problematic insofar as the epoxy, alkoxy, and alkenyloxy groups were ostensibly supposed to be members of the genus defined as being an aromatic ring or a carbonyl group but these were not, in fact, limiting members of said genus.

Allowable Subject Matter

Based on an indication of allowable subject matter in claim 6, Applicant has amended claim 1 such that the adhesion promoter, component (D), must adhere to the structural description provided in original claim 6. Applicant has also added new claim 18, which mirrors original claim 1 in most respects but has the added limitation that the curing additive is of the peroxide type. Schleifstein et al., U.S. Patent # 6241914 does not contemplate the employment of a peroxide as the curing agent hence new claim 18 would not be anticipated by this reference. Furthermore, the gist of their invention was to identify an approach for precluding the formation of volatile organosilicon by-products in metal-cured silicone elastomers that are subjected to elevated temperatures hence there would have been no motivation to replace the curing system employed therein with a peroxide. Azechi et al., U.S. Patent # 6,469,090, on the other hand, discloses as one embodiment of their invention a composition identical to claim 18. However, Applicant overcomes a potential rejection over this reference with their submission of a translation of their priority document made of record in accordance with 37 CFR 1.55.

Cited as being of interest is Mitani et al., U.S. Patent # 5,932,145 for its disclosure of a conductive silicone rubber composition that anticipates many aspects of the instant invention. While Mitani does not disclose conductive particles equivalent to component (C), there is suggestion in the prior art that the three-layered conductive polymers presently disclosed are advantageous over more convention conductive fillers, usually silver, because they are susceptible to corrosion. Nonetheless, Mitani also does not disclose the type of adhesion promoter required by the claims. Fujiki et al., U.S. Patent # 5,405,896, which does disclose adhesion promoters featuring both an Si-H group and one of an aromatic ring and/or a carbonyl group, is not properly combinable with Mitani because the compositions taught by Mitani are applied to metal articles and the adhesion promoters disclosed by Fujiki are intended to improve the bonding of the silicone to polymer resins.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 703-605-1176. The examiner can normally be reached on Monday-Friday 8:00-4:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

November 15, 2003

A handwritten signature in cursive script, appearing to read "Robert Dawson".

Robert Dawson
Supervisory Patent Examiner
Technology Center 1700